

# Service Manual

Microwave Oven

NN-3559, NN-3809  
NN-3859, NN-3959



## Specifications

|                          |                                             |
|--------------------------|---------------------------------------------|
| Power Source :           | 220 V AC Single Phase 50 Hz                 |
| Power Requirement :      | 1,400 W.....Microwave<br>1,800 W.....Heater |
| Output :                 | 750 W.....Full Microwave Power              |
| Microwave Frequency :    | 2,450 MHz                                   |
| Timer :                  | 99 Min. 99 Sec./9 Hr. 99 Min.               |
| Outside Dimensions :     | 558 mm (W) × 450 mm (D) × 390 mm (H)        |
| Oven Cavity Dimensions : | 367 mm (W) × 372 mm (D) × 232 mm (H)        |
| Weight :                 | 29 kg                                       |

Specifications subject to change without notice.

# Panasonic

Matsushita Electric Industrial Co., Ltd.

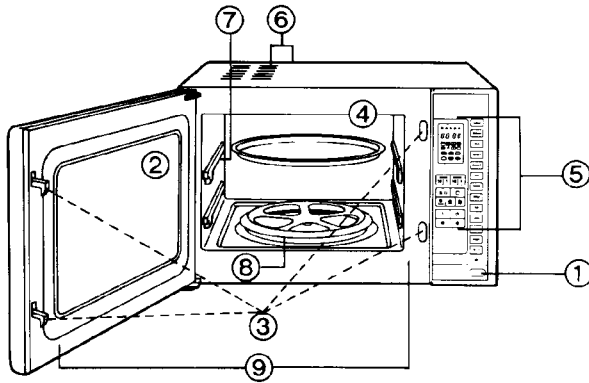
Central P.O. Box 288, Osaka 530-91, Japan

## FEATURE CHART

| MODEL                              |         |                    |         |
|------------------------------------|---------|--------------------|---------|
| FEATURE                            | NN-3559 | NN-3809<br>NN-3859 | NN-3959 |
| CYCLIC DEFROST                     | ○       | ○                  | ○       |
| THREE STAGE COOKING                | ○       | ○                  | ○       |
| AUTO REHEAT                        | ○       | —                  | —       |
| AUTO WEIGHT DEFROST                | ○       | —                  | —       |
| AUTO WEIGHT                        | ○       | —                  | —       |
| AUTO PROGRAM COOKING (12 CATEGORY) | —       | ○                  | ○       |
| COMBINATION — TIME COOKING         | ○       | ○                  | ○       |
| CONVECTION — AUTO PREHEATING       | ○       | ○                  | ○       |
| CONVECTION — TIME COOKING          | ○       | ○                  | ○       |
| CONVECTION — 2 LEVEL COOKING       | ○       | ○                  | ○       |
| GRILL — AUTO PREHEATING            | ○       | ○                  | ○       |
| GRILL — TIME COOKING               | ○       | ○                  | ○       |
| DELAY/STAND                        | ○       | ○                  | ○       |
| DIGITAL CLOCK                      | ○       | ○                  | ○       |
| PERO CLEAN FILTER                  | —       | ○                  | ○       |
| BREAD MAKING                       | —       | —                  | ○       |

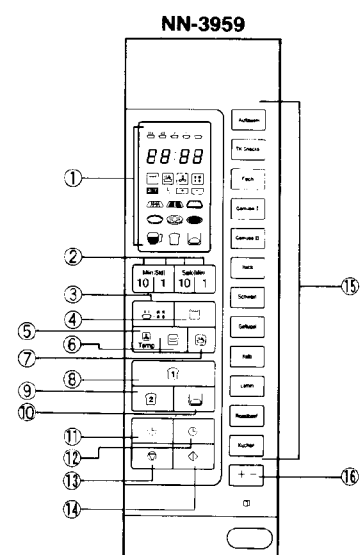
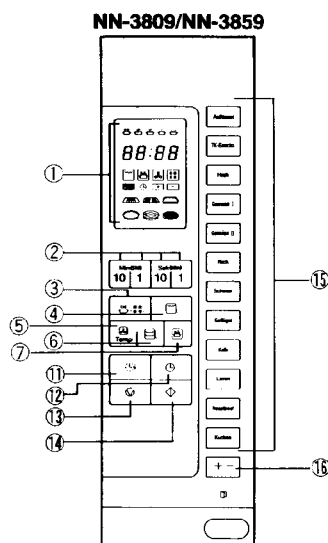
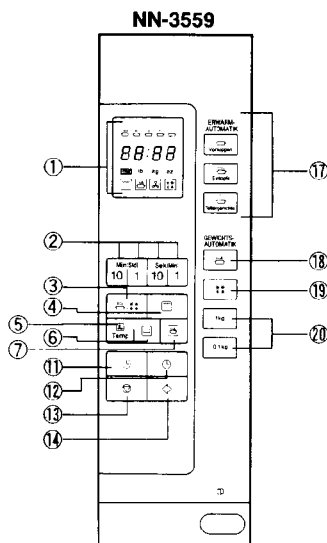
## FEATURE DIAGRAM & CONTROL PANEL

### Feature Diagram



- ① Door Release
- ② Oven Window
- ③ Door Safety Lock System
- ④ Oven Air Vents
- ⑤ Control Panel
- ⑥ External Oven Air Vents
- ⑦ Slide in Shelf Guides
- ⑧ Turntable
- ⑨ Door Seal

### Control Panel



- ① Display Window
- ② Time Pads
- ③ Power Pad
- ④ Grill Pad
- ⑤ Convection-Temp Pad
- ⑥ Convection-2 Level Pad
- ⑦ Combination Pad

- ⑧ Bread 1 Pad
- ⑨ Bread 2 Pad
- ⑩ Dough Pad
- ⑪ Delay/Stand Pad
- ⑫ Clock Pad
- ⑬ Stop/Cancel Pad
- ⑭ Start Pad

- ⑮ Auto Program Cooking Pads
- ⑯ Adjust to Taste Pad
- ⑰ Auto Reheat Pads
- ⑱ Auto Weight Combination Pad
- ⑲ Auto Weight Defrost Pad
- ⑳ 1 kg/0.1 kg Pads

# OPERATION AND DIGITAL PROGRAMMER CIRCUIT TEST PROCEDURE

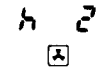
## 1. Clock Setting

|                                                                                   |                                                                                   |                                                                                    |                                                                                                                           |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1. Plug the power supply cord into wall receptacle.                               | 2. Tap <b>Clock</b> Pad.                                                          | 3. Enter time of day (TOD) by tapping appropriate <b>10 1 10 1</b> pads.           | 4. Tap <b>Clock</b> Pad.<br>TOD has now been registered into the digital programmer circuit and will count up by minutes. |
|  |  |  |                                        |

## 2. Time Cooking/Two Stage

|                                                                                     |                                                                                     |                                                                                                 |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1. Place a water load in the oven.                                                  | 2. Tap <b>Power</b> pad once for High power.<br>(1st stage)                         | 3. Set for 5 seconds by tapping appropriate <b>10 1 10 1</b> pads.                              | 4. Tap <b>Power</b> pad 3 times for Medium power.<br>(2nd stage)                    |
|                                                                                     |    |               |  |
| 5. Set for 10 seconds by tapping appropriate <b>10 1 10 1</b> pads.                 | 6. Tap <b>Start</b> pad.                                                            | 7. When first stage cooking time has elapsed, oven automatically switches to 2nd stage cooking. | 8. When 2nd stage cooking time has elapsed, oven beeps 5 times and shuts off.       |
|  |  |             | • TOD reappears in the display window.                                              |

## 3. Convection Cooking with Preheat

|                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. Tap <b>Temp</b> pad twice.                                                       | 2. Tap <b>Start</b> pad.                                                            | 3. When preheating is completed, oven beeps 3 times.<br>"P" begins to blink.         | 4. After completion of preheating, be sure to open the door.                          |
|  |  |  |  |
| 5. Close the door and set bake cooking time for 2 minutes.                          | 6. Tap <b>Start</b> pad.                                                            | NOTE: NN-3559 accessory display is not appeared.                                     |                                                                                       |
|  |  |                                                                                      |                                                                                       |

#### 4. Convection—2 Level Cooking

|                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1. Tap <b>2 Level Bake</b> pad.                                                   | 2. Tap <b>Temp</b> pad 7 times.                                                   | 3. Tap <b>Start</b> pad.                                                           | 4. When preheating is completed, oven beeps three times. "P" begins to blink.       |
|  |  |  |  |
| 5. After completion of preheating be sure to open the door.                       | 6. Close the door and set time for 10 minutes.                                    | 7. Tap <b>Start</b> pad.                                                           |                                                                                     |
|  |  |  |                                                                                     |

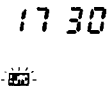
#### 5. Grill Cooking

|                                                                                     |                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1. Tap <b>Grill</b> pad once.                                                       | 2. Set Cooking time for 30 minutes.                                                 | 3. Tap <b>Start</b> pad.                                                             |
|  |  |  |

#### 6. Combination Cooking

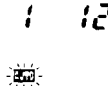
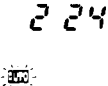
|                                                                                     |                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1. Tap <b>Combi</b> pad twice.                                                      | 2. Set cooking time for 1 hour.                                                     | 3. Tap <b>Start</b> pad.                                                             |
|  |  |  |

## 7. Auto Defrost (NN-3809/NN-3859/NN-3959)

|                                                                                                                                                                                                                                                             |                                                                                   |                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1. Place the water load of 500g including container with plastic rack at center of tray and tap <b>Defrost</b> pad.                                                                                                                                         | 2. Tap <b>Start</b> pad.                                                          | 3. After reading weight of food, total defrosting time is appeared.                |
| <br><br> |  |  |

NOTE: If 16 00 to 20 20 appears, WEIGHT SENSOR FUNCTION is normal.  
Because, there is reading tolerance of weight sensor.

## 8. Auto Program (Vegetable) (NN-3809/NN-3859/NN-3959)

|                                                                                                                                                                                                                                                |                                                                                                                                                                        |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1. Pour 150 ± 15cc (4.5 ± 1/2 ozs) of room temperature water in a beaker, and place it in the center of the oven.                                                                                                                              | 2. Tap <b>Vegetable</b> pad.                                                                                                                                           | 3. Tap <b>Start</b> pad.                                                          |
|                                                                                                                                                                                                                                                | <br> |  |
| 4. The humidity sensor detects steam about 2 to 4 minutes after the Start pad is tapped.<br>Auto Reheat Cooking (T1) automatically switches to time cooking (T2).<br>The remainder of cooking time appears in display window with beep sounds. | 5. When the balance of cooking time has elapsed, oven stops and beeps five times.                                                                                      |                                                                                   |
|                                                                                                                                                             |                                                                                     | • TOD reappears in the display window.                                            |

NOTE: Cooking time will vary depending on the water temperature, the shape of beaker or the power source voltage.

NOTE: Please refer to description of operating sequence.

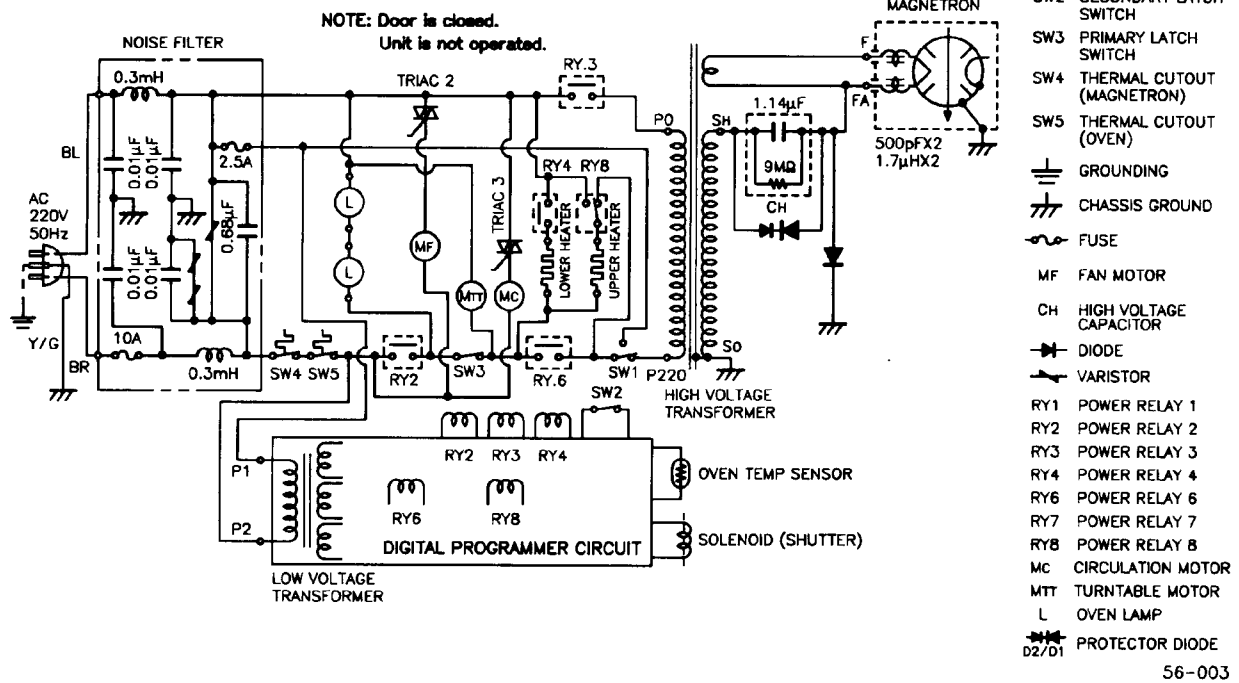
NOTE: If 1 12 to 2 24 appears, AUTO SENSOR FUNCTION is normal.

## 9. Bread Bakery (NN-3959)

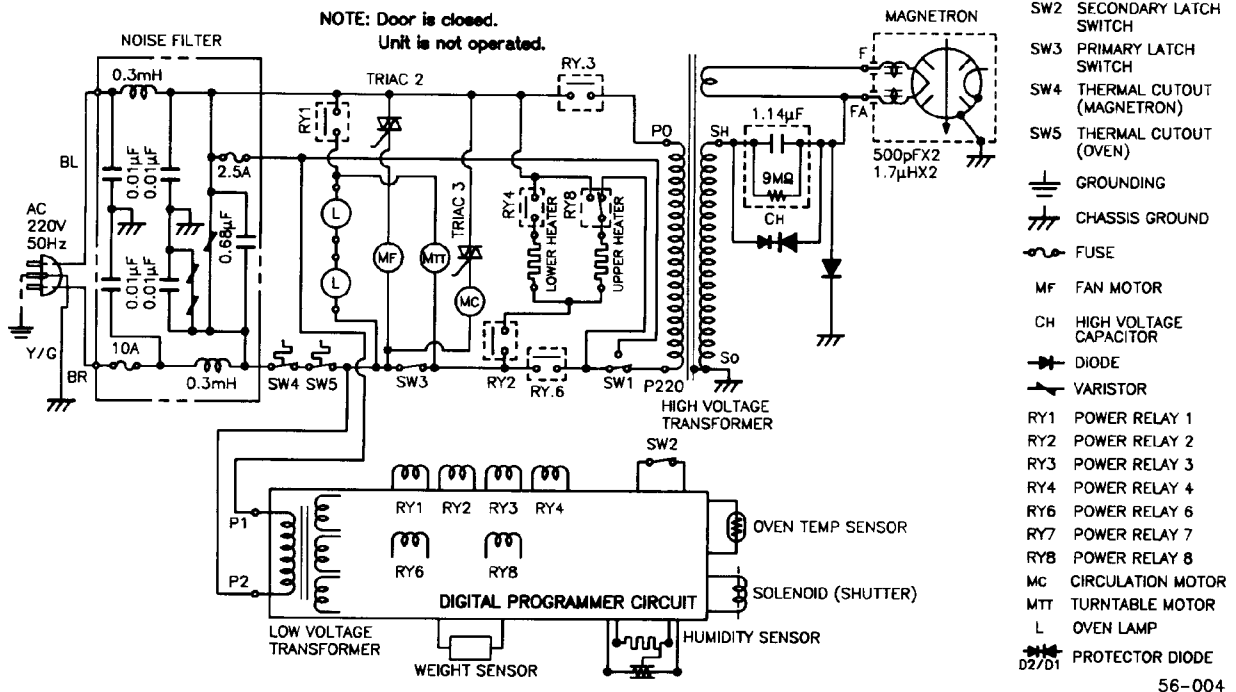
|                                                                                                                                                                            |                                                                                     |                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 1. Place the bread pan at center of oven and tap <b>Bread 1</b> pad.                                                                                                       | 2. Tap <b>Start</b> pad.                                                            | 3. After 10 minutes, remaining time is appeared in the display window. |
| <br> |  |                                                                        |

# SCHEMATIC DIAGRAM

NN-3559

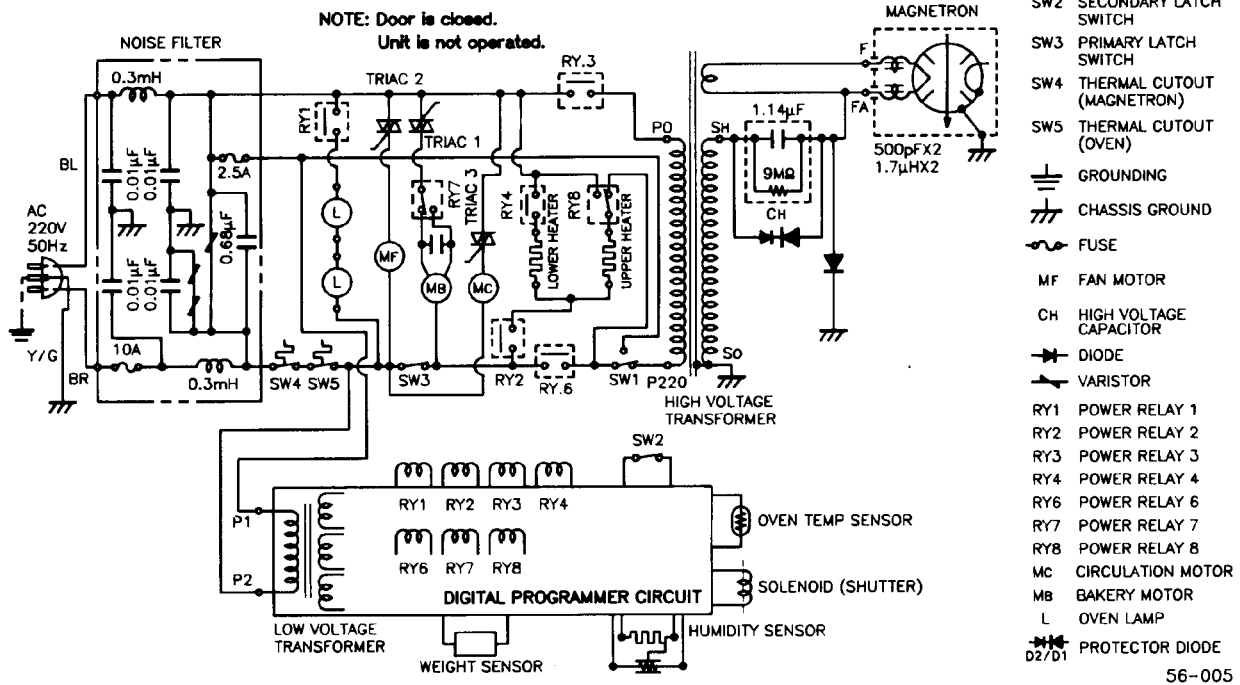


NN-3809/3859



# SCHEMATIC DIAGRAM

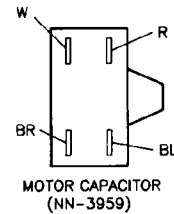
NN-3959



## WIRING DIAGRAM

|                               |   | NN-3559 | NN-3809<br>NN-3859<br>NN-3959 |
|-------------------------------|---|---------|-------------------------------|
| <p>PRIMARY LATCH SWITCH</p>   | ① | Y/Y     | Y                             |
|                               | ② | W/W     | W/BR                          |
| <p>SECONDARY LATCH SWITCH</p> | ③ | P       | P                             |
|                               | ④ | P       | P                             |
| <p>SHORT SWITCH</p>           | ⑤ | B       | B                             |
|                               | ⑥ | BR      | BR                            |
|                               | ⑦ | OR/P    | OR/P                          |
| <p>POWER RELAY 2 (RY 2)</p>   | ⑧ | BR/BR/W | Y/Y                           |
|                               | ⑨ | W       | B/W                           |

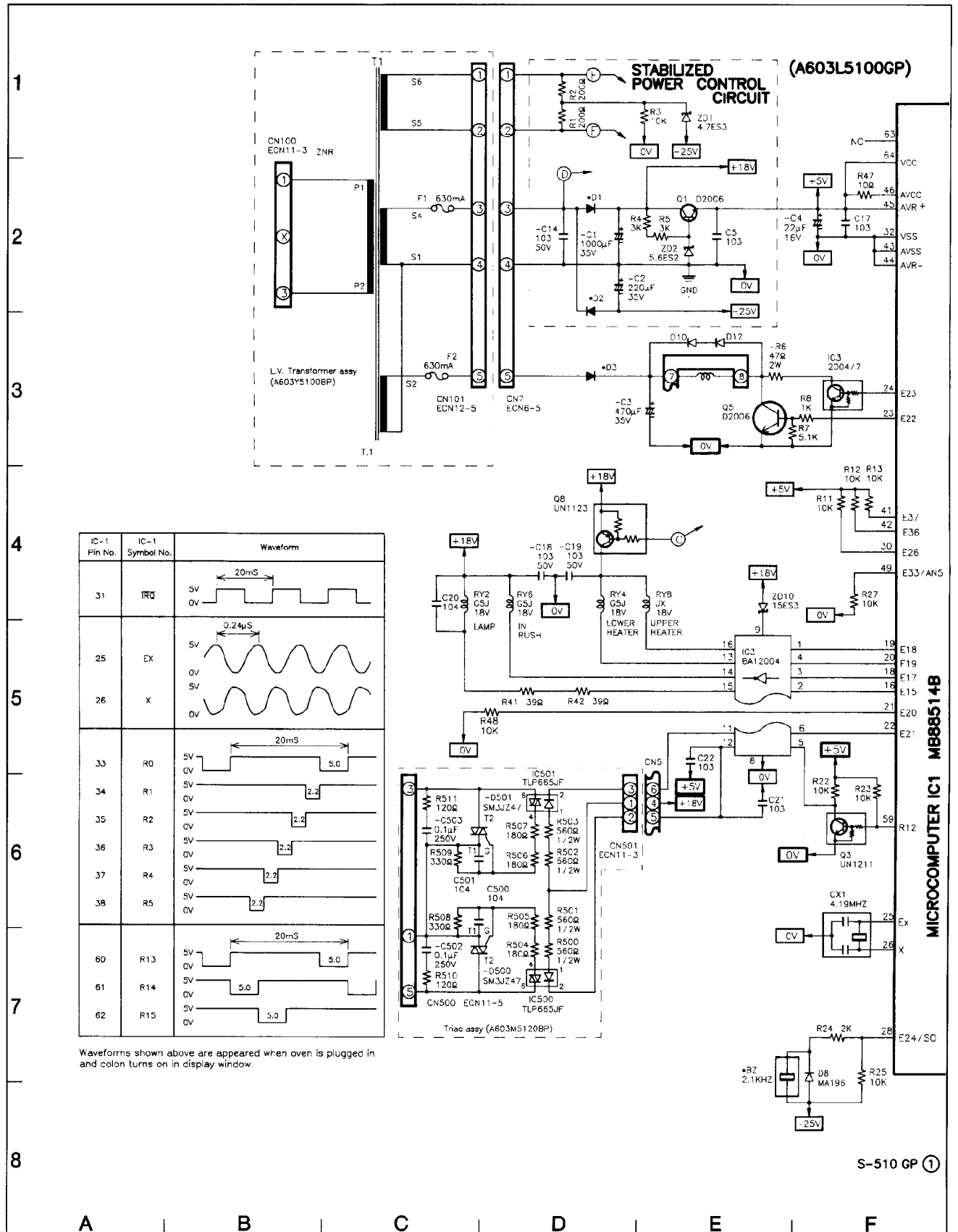
|                             |   | NN-3559 | NN-3809<br>NN-3859<br>NN-3959 |
|-----------------------------|---|---------|-------------------------------|
| <p>POWER RELAY 3 (RY 3)</p> | ⑩ | B/BL    | B/BL                          |
|                             | ⑪ | Y       | Y                             |
| <p>POWER RELAY 4 (RY 4)</p> | ⑫ | B/BL    | BL/BL/W                       |
|                             | ⑬ | W       | BR                            |
| <p>POWER RELAY 6 (RY 6)</p> | ⑭ | B/Y     | —                             |
|                             | ⑮ | BR/OR   | BR/BR                         |
| <p>POWER RELAY 8 (RY 8)</p> | ⑯ | B/B/BL  | B/W                           |
|                             | ⑰ | OR      | BR                            |
|                             | ⑱ | BL      | BL                            |



| SYMBOL | COLOUR |
|--------|--------|
| OR     | ORANGE |
| BL     | BLUE   |
| BR     | BROWN  |
| W      | WHITE  |
| Y      | YELLOW |
| R      | RED    |
| GR     | GRAY   |
| B      | BLACK  |
| P      | PINK   |

# DIGITAL PROGRAMMER CIRCUIT (NN-3559)

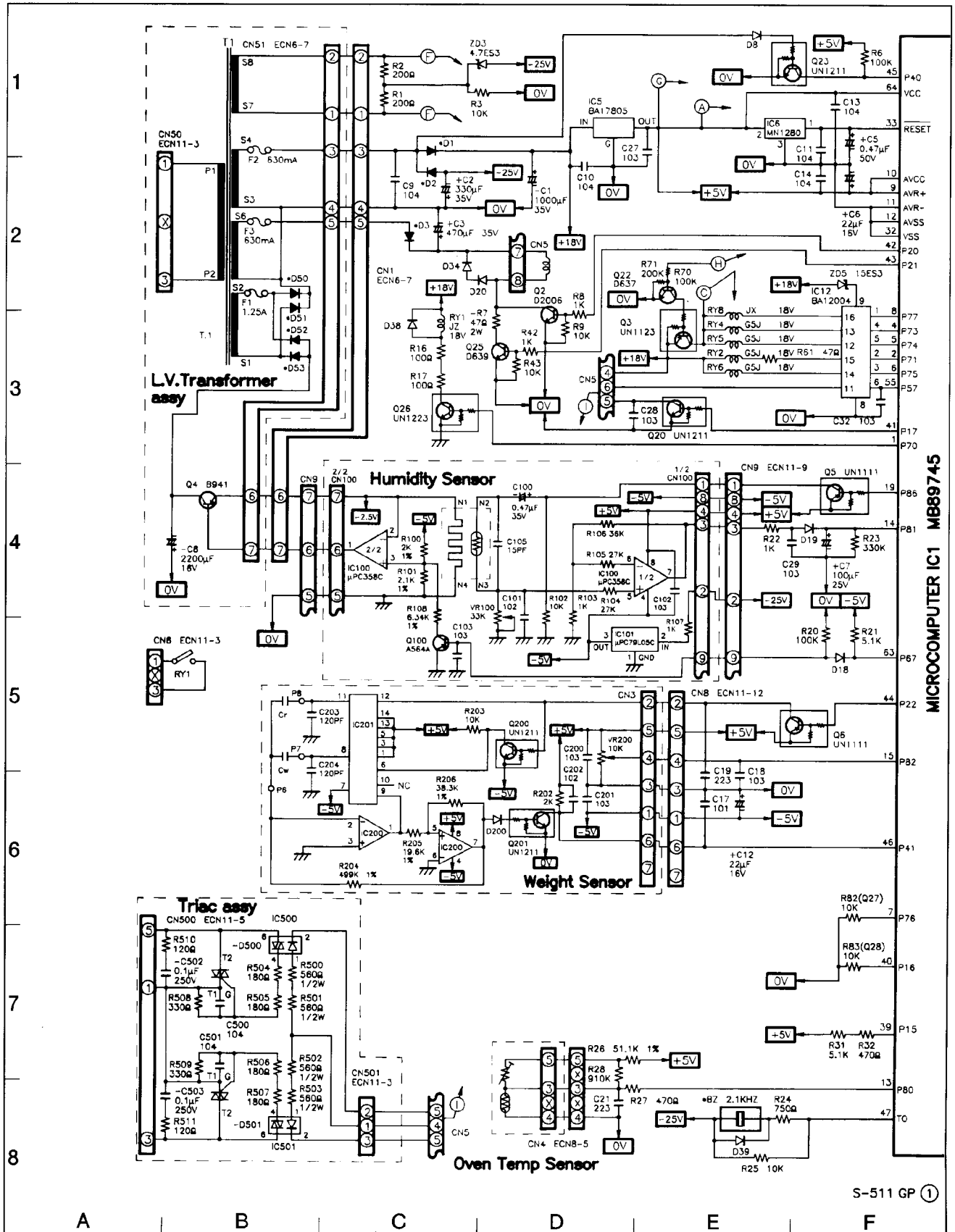
## SCHEMATIC DIAGRAM



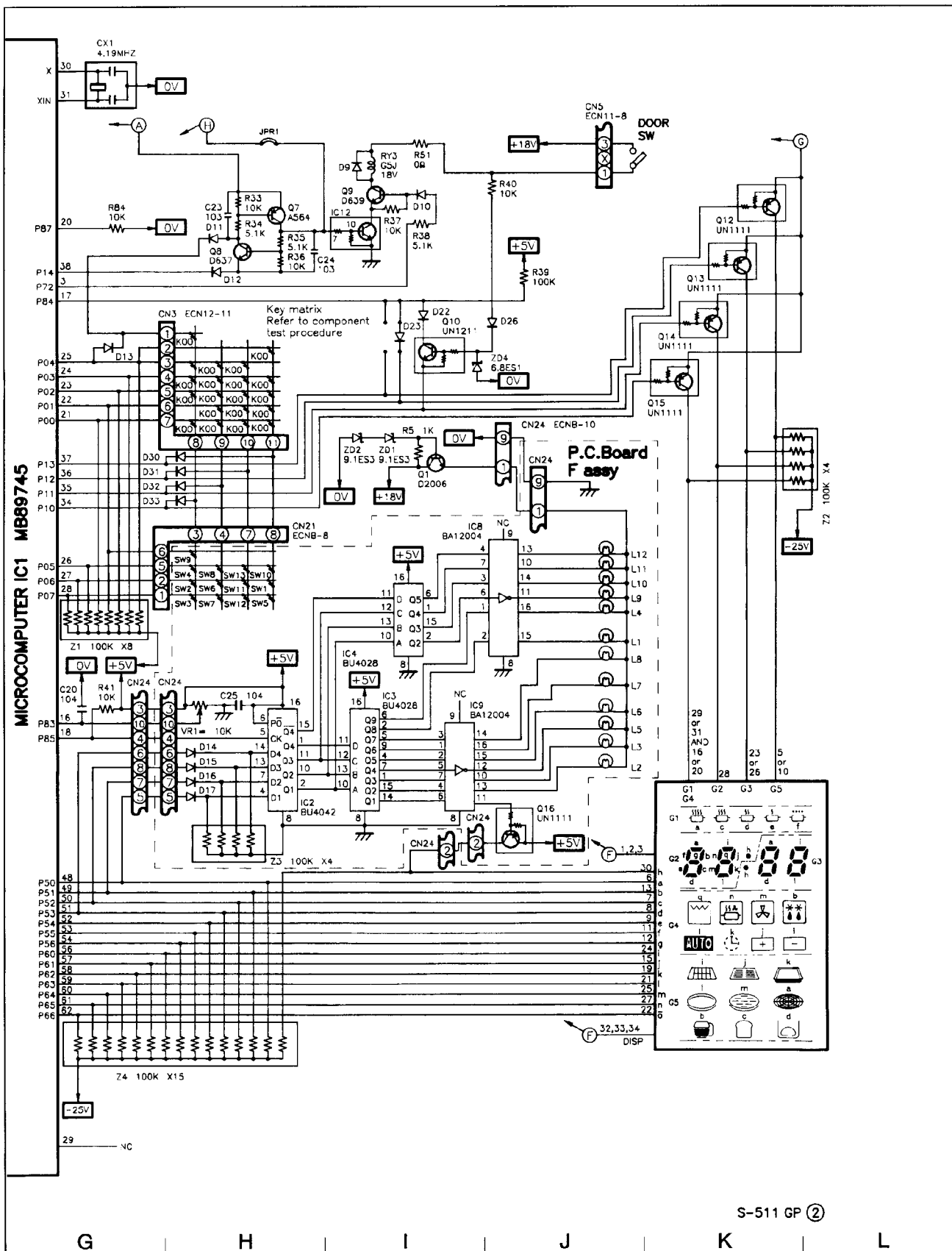


# DIGITAL PROGRAMMER CIRCUIT (NN-3809/3859)

## SCHEMATIC DIAGRAM

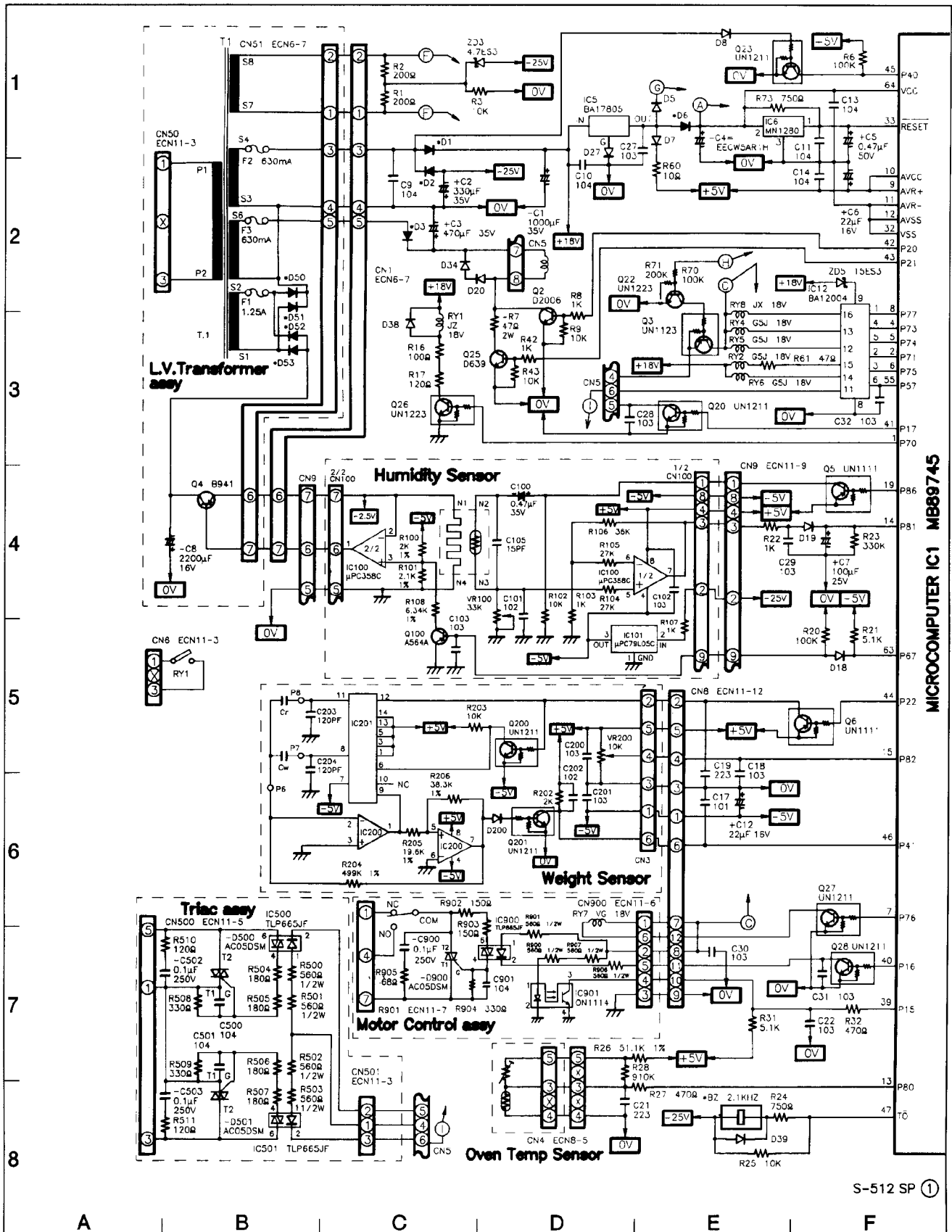


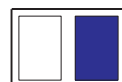
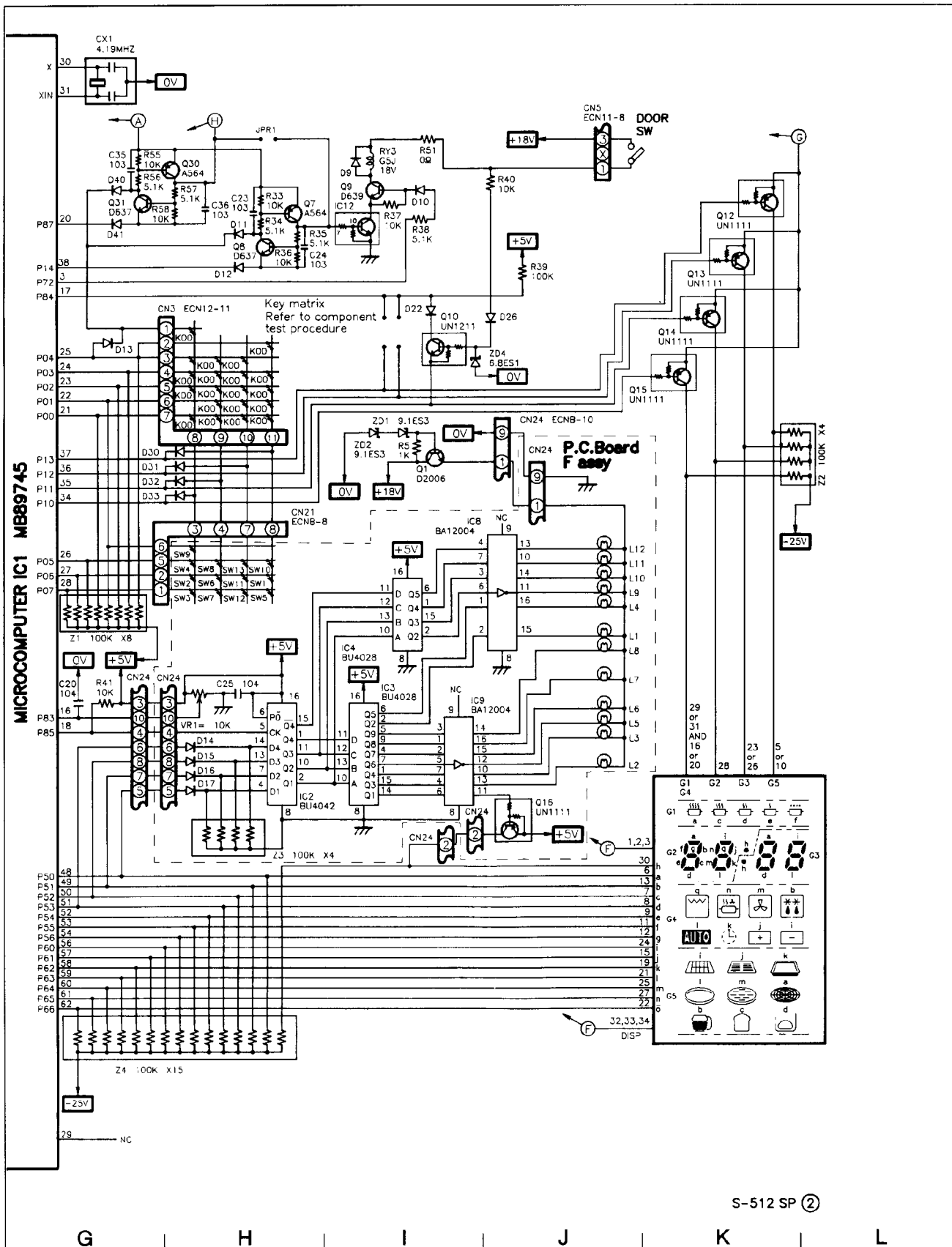
S-511 GP ①



# DIGITAL PROGRAMMER CIRCUIT (NN-3959)

## SCHEMATIC DIAGRAM

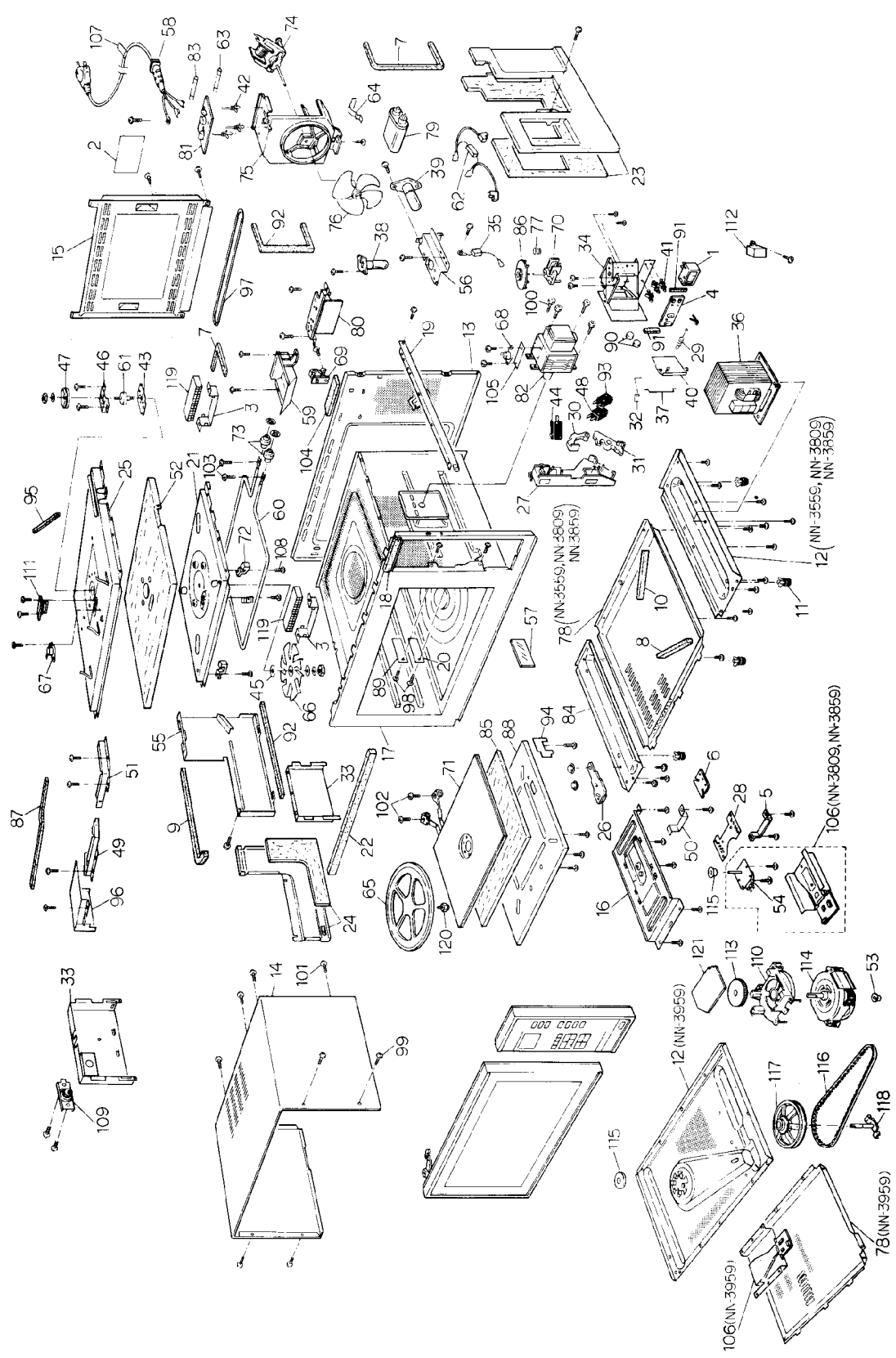




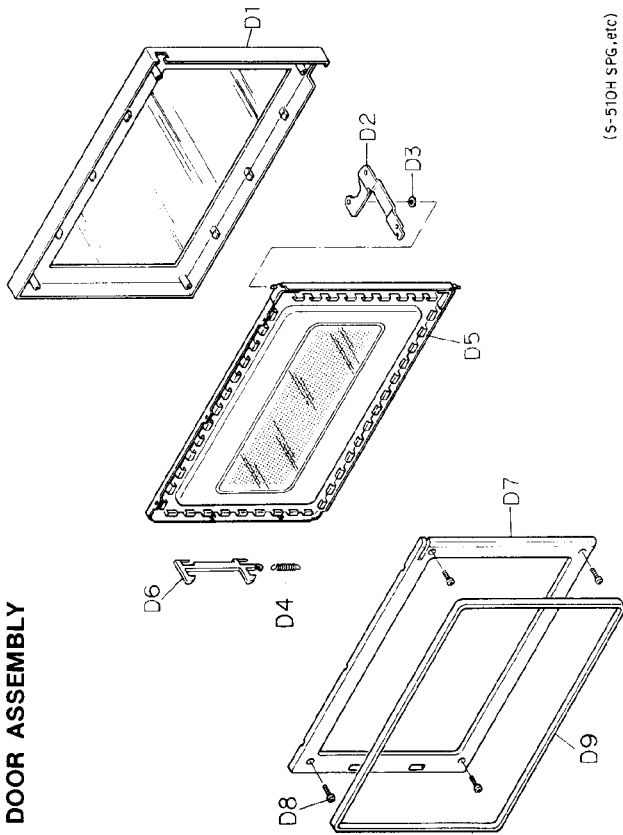
# EXPLODED VIEW AND PARTS LIST

(S-510H SPG, etc.)

EXPLODED VIEW

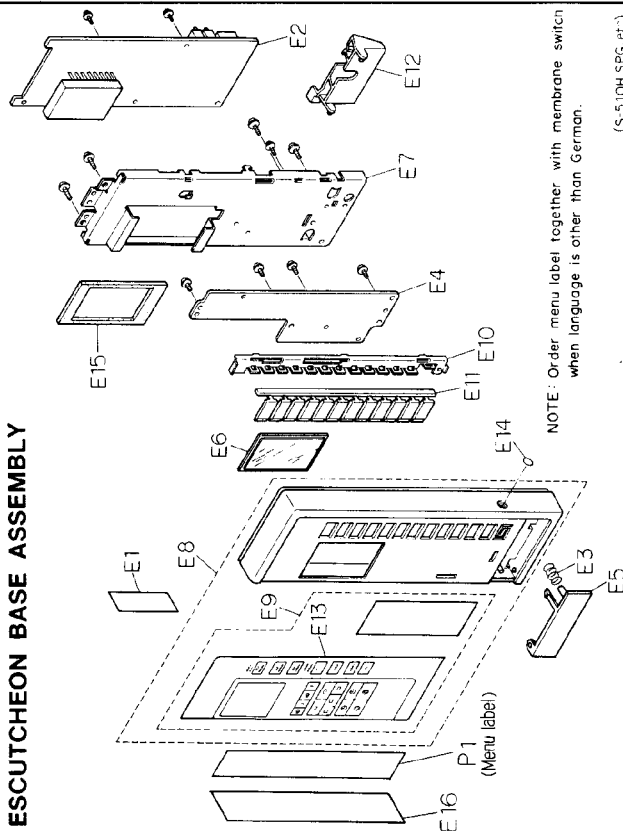


## DOOR ASSEMBLY



(S-510H SPG, etc.)

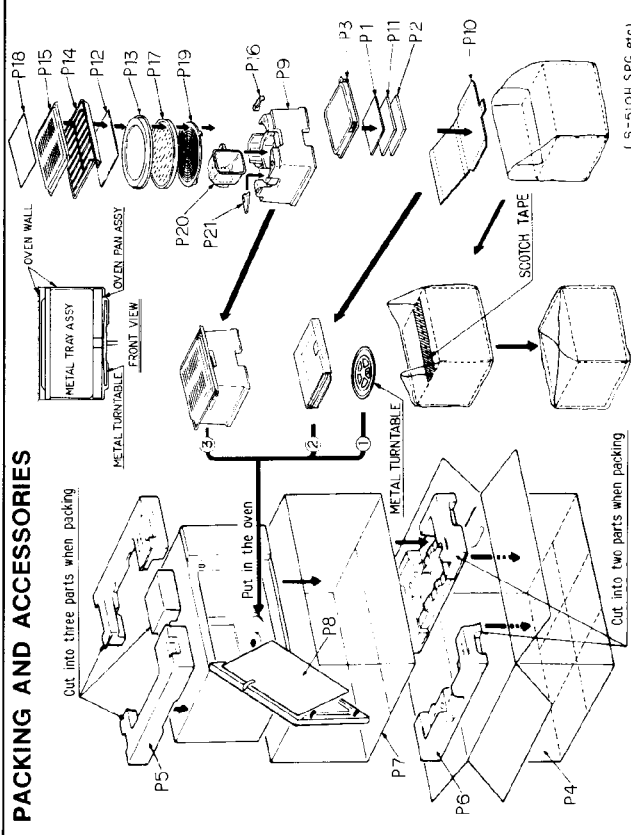
## ESCUTCHEON BASE ASSEMBLY



NOTE: Order menu label together with membrane switch when language is other than German.

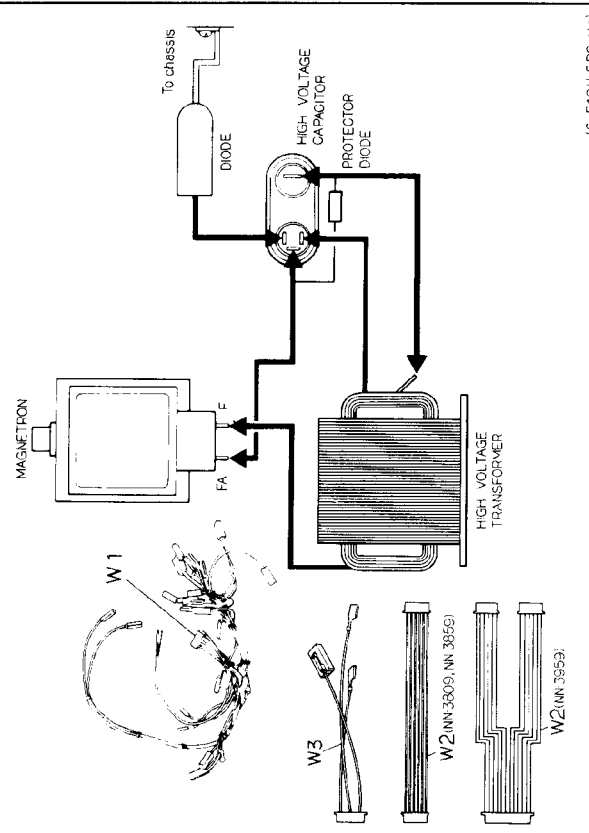
(S-510H SPG, etc.)

## PACKING AND ACCESSORIES



(S-510H SPG, etc.)

## WIRING MATERIAL



(S-510H SPG, etc.)

## PARTS LIST

NOTE 1: When ordering replacement part(s), please use part number(s) shown in this parts list. Do not use description of the part.

### 2: Important safety notice:

Components identified by  $\triangle$  mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

### 3: Alphabet marks in Remarks columns (i.e. SPG, etc) indicate parts applicable to only specified country models as follows.

**SPG: For Scandinavian Countries, WPG: For Switzerland**

Items marked \* are supplied by MELUK.

| Ref. No. | Part No.                 | Part Name & Description | Pcs/Set | Remarks                        | Ref. No. | Part No.                 | Part Name & Description | Pcs/Set | Remarks                                    |
|----------|--------------------------|-------------------------|---------|--------------------------------|----------|--------------------------|-------------------------|---------|--------------------------------------------|
| 1        | A60174210AP              | Solenoid                | 1       |                                | 51       | A40245110BP              | Exhaust guide A         | 1       |                                            |
| * 2      | AEE00062Q0EP             | Warning label           | 1       |                                | 52       | A22435110BP              | Adiabatic material B    | 1       |                                            |
| 3        | A42575120AP              | Filter holder B         | 2       | NN-3809, NN-3859, NN-3869      | 53       | A4131-1520               | Pully A                 | 1       | NN-3859                                    |
| 4        | A690B5120BP              | Triac assy              | 1       |                                | 54       | $\triangle$ A63265110BP  | Turntable motorassy     | 1       | NN-3559, NN-3809, NN-3859 (AC, 4W, Single) |
| 5-1      | A66305020AP              | Motor stopper           | 1       | NN-3559                        | 55       | A400K5110BP              | Exhaust guide           | 1       |                                            |
| 5-2      | A6630-2050               | Motor stopper           | 1       | NN-3809, NN-3859, NN-3869      | 56       | A66035110BP              | Oven lamp bracket       | 1       |                                            |
| 6        | A60325020AP              | Terminal plate A        | 1       |                                | 57       | A64375110BP              | Glass plate             | 1       |                                            |
| 7        | ANE000Z000AA             | Cushion rubber C        | 2       |                                | 58-1     | $\triangle$ A900C5110SP  | AC cord W/plug          | 1       | NN-3559, NN-3859 SPG, NN-3859 SPG (220V)   |
| 8        | ANE0925000AL             | Cushion rubber C        | 1       | NN-3559, NN-3809, NN-3859      | 58-2     | $\triangle$ A900C5110WP  | AC cord W/plug          | 1       | NN-3809, NN-3859 WPG, NN-3859 WPG          |
| 9        | ANE0925000BU             | Cushion rubber C        | 1       |                                | 59       | A402A5110BP              | Air guide E             | 1       |                                            |
| 10       | ANE0928000BK             | Cushion rubber          | 1       | NN-3559, NN-3809, NN-3859      | 60       | $\triangle$ A630H5110GP  | Surface heater          | 1       |                                            |
| 11       | ANE1008-5S0              | Rubber foot             | 4       |                                | 61       | A41645110SS              | Shaft assy              | 1       |                                            |
| 12-1     | A10015020AP              | Base                    | 1       | NN-3559, NN-3809, NN-3859      | 62       | $\triangle$ A606V5110BP  | Protector diode         | 1       |                                            |
| 12-2     | A100A5120BP              | Base                    | 1       | NN-3859                        | 63       | $\triangle$ XBA2C25TROBS | Fuse                    | 1       | (2.5A)                                     |
| 13       | A10045110BP              | Back panel              | 1       |                                | 64       | A61885110BP              | Capacitor holder        | 1       |                                            |
| 14-1     | A10095110HBP             | Cabinet body assy       | 1       | NN-3559, NN-3859, NN-3869      | 65-1     | A201F5020AP              | Metal turntable         | 1       | NN-3559, NN-3809, NN-3859                  |
| 14-2     | A10095110BP              | Cabinet body assy       | 1       | NN-3809                        | 65-2     | A201F5120BP              | Metal turntable         | 1       | NN-3859                                    |
| 15       | A10585110BP              | Back panel cover A      | 1       |                                | 66       | A22395020AQ              | Circulation fan         | 1       |                                            |
| 16       | A63235020AP              | Motor bracket           | 1       | NN-3559, NN-3809, NN-3859      | 67,68    | $\triangle$ A61454760JP  | Thermal cutout          | 2       |                                            |
| 17-1     | A200A5110BP              | Oven                    | 1       | NN-3559, NN-3809, NN-3859      | * 69     | AEE1140X70AP             | Stopper A               | 1       |                                            |
| 17-2     | A200A5120BP              | Oven                    | 1       | NN-3859                        | 70       | $\triangle$ A41795110GP  | Circulation motor       | 1       | (AC, 35W, Single)                          |
| 18       | ANE0921000CG             | Cushion rubber C        | 1       |                                | 71-1     | $\triangle$ A630G5110GP  | Sheathed heater         | 1       | NN-3559, NN-3809, NN-3859                  |
| 19       | A20365020AP              | Reinforce bracket B     | 1       |                                | 71-2     | $\triangle$ A630G5120GP  | Sheathed heater         | 1       | NN-3859                                    |
| 20       | A20555110BP              | Cover A                 | 1       |                                | 72       | A64175110BP              | Heater support A        | 3       |                                            |
| 21       | A21445110BP              | Upper panel B           | 1       |                                | 73       | ANE6501K90AP             | Holder C                | 2       |                                            |
| 22       | A11275110BP              | Cushion                 | 1       |                                | 74       | $\triangle$ A400A4760JP  | Fan motor               | 1       | (AC, 26W, Single)                          |
| 23       | A203N5110BP              | Right heater panel      | 1       |                                | 75       | A41445020AP              | Orifice                 | 1       |                                            |
| 24       | A203S5110BP              | Left heater panel       | 1       |                                | 76       | ANE40086W0AP             | Fan                     | 1       |                                            |
| 25       | A22785110BP              | Upper heater panel      | 1       |                                | 77       | ANE4057-F50              | Spring                  | 1       |                                            |
| 26       | A301L4210AP              | Lower hinge             | 1       |                                | 78-1     | A10265110BP              | Motor cover             | 1       | NN-3559, NN-3809, NN-3859                  |
| 27       | A30204310AG              | Door hook A             | 1       |                                | 78-2     | A10265120BP              | Motor cover             | 1       | NN-3859                                    |
| 28-1     | A66395020AP              | Motor bracket B         | 1       | NN-3559                        | 79       | $\triangle$ A60904080GP  | H.V.Capacitor           | 1       | (1.14uF, AC2100V)                          |
| 28-2     | A66395110BP              | Motor bracket B         | 1       | NN-3809, NN-3859               | 80-1     | $\triangle$ A692M5100GP  | L.V.Transformer assy    | 1       | NN-3559                                    |
| 29       | A41754210AP              | Spring                  | 1       |                                | 80-2     | $\triangle$ A692M5120GP  | L.V.Transformer assy    | 1       | NN-3809, NN-3859, NN-3859                  |
| 30       | A31384650AP              | Hook spacer C           | 1       |                                | 81       | A692Y5100SP              | Noise filter assy       | 1       |                                            |
| 31       | A31374650AP              | Hook spacer B           | 1       |                                | 82       | $\triangle$ 2M210-M1C    | Magnetron               | 1       |                                            |
| 32       | A41765110BP              | Spring B                | 1       |                                | 83       | $\triangle$ A62304210BP  | Fuse                    | 1       |                                            |
| 33-1     | A41075100GP              | Exhaust guide B         | 1       | NN-3559                        | 84       | A11295020AP              | Base B                  | 1       | NN-3559, NN-3809, NN-3859                  |
| 33-2     | A401Y5120AP              | Exhaust guide           | 1       | NN-3809, NN-3859, NN-3869      | 85       | A22425020AP              | Adiabatic material A    | 1       |                                            |
| 34       | A400E5110BP              | Air guide A             | 1       |                                | 86       | A40085110BP              | Fan                     | 1       |                                            |
| 35       | A62024000AP              | Diode                   | 1       | (Si, 0.35mA)                   | 87       | ANE0962000AR             | Cushion rubber D        | 1       |                                            |
| 36       | $\triangle$ A620A5100GP  | H.V.Transformer         | 1       | (1.4KVA)                       | 88       | A22775020AP              | Lower heater panel      | 1       |                                            |
| 37       | A41744210AP              | Shaft                   | 1       |                                | 89       | A23545110BP              | Cover B                 | 1       |                                            |
| 38-39    | $\triangle$ A610T4660AP  | Incandescent lamp       | 2       | (125V, 20W)                    | 90       | A41834210AP              | Cushion rubber A        | 2       |                                            |
| 40       | A41735110BP              | Shutter                 | 1       |                                | 91       | A41844210AP              | Cushion rubber B        | 2       |                                            |
| 41       | ANE6532-F70              | Spacer A                | 3       |                                | 92       | ANE000Z000AB             | Cushion rubber C        | 2       |                                            |
| 42       | A65325110BP              | Spacer A                | 3       |                                | 93       | $\triangle$ A61424650AP  | Micro switch            | 1       | Secondary latch switch (L-3C2-MR)          |
| 43       | A41585020AQ              | Fan bracket B           | 1       |                                | 94       | A40305110BP              | Air guide D             | 1       |                                            |
| 44       | $\triangle$ ANE61422Q0BP | Micro switch            | 1       | Primary latch switch (AV53406) | 95       | A41025110BP              | Air guide cushion A     | 1       |                                            |
| 45       | A41635020AQ              | Fan spacer C            | 1       |                                | 96       | A41195110BP              | Exhaust guide D         | 1       | NN-3859 SPG                                |
| 46       | A41575020AQ              | Fan bracket A           | 1       |                                | 97       | A41555110BP              | Square belt, Si         | 1       | (1.7mm)                                    |
| 47       | A41325020AQ              | Pulley B                | 1       |                                | 98       | XST4+5VS                 | Screw 4X5               | 2       |                                            |
| 48       | $\triangle$ ANE61782Q0GP | Micro switch            | 1       | Short switch (AV51606)         | 99       | XTC4+10BC                | Tapping screw 4X10      | 4       |                                            |
| 49       | A41145110BP              | Exhaust guide C         | 1       |                                |          |                          |                         |         |                                            |
| 50       | A61435120BP              | Bracket                 | 1       | NN-3859                        |          |                          |                         |         |                                            |

| Ref. No. | Part No.     | Part Name & Description | Pcs/Set | Remarks                                       |
|----------|--------------|-------------------------|---------|-----------------------------------------------|
| 100      | XTWANE4+10RU | Tapping screw 4×10      | 4       |                                               |
| 101      | XYCANE4+E12R | Tapping screw 4×12      | 4       |                                               |
| 102      | XYN5+C10FN   | Screw 5×10              | 2       |                                               |
| 103      | XYT4+C8VS    | Screw 4×8               | 4       |                                               |
| 104      | ANE0924000DG | Cushion rubber C        | 1       |                                               |
| 105      | A62J84310AG  | Spacer                  | 1       |                                               |
| 106-1    | A203K5110BP  | Weight sensor assy      | 1       | NN-3809, NN-3859                              |
| 106-2    | A203K5120BP  | Weight sensor assy      | 1       | NN-3959                                       |
| 107      | ANE0239X70SP | Cord label              | 1       |                                               |
| 108      | XTWANE4+12BN | Tapping screw 4×12      | 2       |                                               |
| 109      | A601A5110BP  | Humidity sensor         | 1       | NN-3809, NN-3859, NN-3959                     |
| 110      | A65855120BP  | P.C.B.Holder            | 1       | NN-3959                                       |
| 111-1    | A605Y5100GP  | Oven temp sensor        | 1       | NN-3559 With small P.C.B                      |
| 111-2    | A605Y5110BP  | Oven temp sensor        | 1       | NN-3809, NN-3859, NN-3959<br>With small P.C.B |
| 112      | A66985120GP  | Capacitor               | 1       | NN-3959                                       |
| 113      | A6713-1520   | Detection disk          | 1       | NN-3959                                       |
| 114      | A67335120GP  | Bakery motor            | 1       | NN-3959                                       |
| 115-1    | ANE4071-5G0  | Washer                  | 1       | NN-3559                                       |
| 115-2    | A4071-1110   | Washer                  | 1       | NN-3809, NN-3859                              |
| 115-3    | A4071-1520   | Washer                  | 1       | NN-3959                                       |
| 116      | A40605120BP  | Flat belt, Si           | 1       | NN-3959                                       |
| 117      | A4132-1520S  | Pulley assy             | 1       | NN-3959                                       |
| 118      | A204G5120BP  | Pulley shaft            | 1       | NN-3959                                       |
| 119      | A42415120AP  | Filter                  | 2       | NN-3809, NN-3859, NN-3959                     |
| 120      | A42525120BP  | Connector B             | 1       | NN-3959                                       |
| 121      | A691S5120BP  | Motor control assy      | 1       | NN-3959                                       |

#### DOOR ASSEMBLY

|      |              |                    |   |                           |
|------|--------------|--------------------|---|---------------------------|
| D1-1 | A302A5110HBP | Door A assy        | 1 | NN-3559, NN-3859, NN-3959 |
| D1-2 | A302A5110GP  | Door A assy        | 1 | NN-3809                   |
| D2   | A300B4210AP  | Upper hinge        | 1 |                           |
| D3   | ANE3081B60AP | Door hinge spacer  | 1 |                           |
| D4   | A30214000AP  | Door key spring    | 1 |                           |
| D5   | A302K5110BP  | Door E assy        | 1 |                           |
| D6   | A30184650AP  | Door key A         | 1 |                           |
| D7-1 | A30855040HAP | Door C             | 1 | NN-3559                   |
| D7-2 | A30855110BP  | Door C             | 1 | NN-3809                   |
| D7-3 | A30855110HBP | Door C             | 1 | NN-3859, NN-3959          |
| D8-1 | XTBANE4+12FC | Tapping screw 4×12 | 4 | NN-3559, NN-3859, NN-3959 |
| D8-2 | XTBANE4+12FK | Tapping screw 4×12 | 4 | NN-3809                   |
| D9   | A33345110BP  | Door C rubber      | 1 | NN-3809, NN-3859, NN-3959 |

#### ESCUTCHEON BASE ASSEMBLY

|      |               |                     |   |                                           |
|------|---------------|---------------------|---|-------------------------------------------|
| E1-1 | A01575100HSP  | Name plate          | 1 | NN-3559                                   |
| E1-2 | A01575110WP   | Name plate          | 1 | NN-3809                                   |
| E1-3 | A01575110HSP  | Name plate          | 1 | NN-3859 SPG                               |
| E1-4 | A01575110HWP  | Name plate          | 1 | NN-3859 WPG                               |
| E1-5 | A01575120HSP  | Name plate          | 1 | NN-3959 SPG                               |
| E1-6 | A01575120HWP  | Name plate          | 1 | NN-3959 WPG                               |
| E2-1 | △ A603L5100SP | D.P.Circuit assy    | 1 | NN-3559<br>(W/Component)                  |
| E2-2 | △ A603L5110SP | D.P.Circuit assy    | 1 | NN-3809 NN-3859<br>(W/Component)          |
| E2-3 | △ A603L5120SP | D.P.Circuit assy    | 1 | NN-3959 (W/Component)                     |
| E3   | ANE80378A0AG  | Spring              | 1 |                                           |
| E4-1 | A605Q5100GP   | P.C.Board F assy    | 1 | NN-3559<br>(W/Component)                  |
| E4-2 | A605Q5110BP   | P.C.Board F assy    | 1 | NN-3809 NN-3859, NN-3959<br>(W/Component) |
| E5-1 | A80725110HBP  | Door opening button | 1 | NN-3559, NN-3859, NN-3959                 |
| E5-2 | A80725110GP   | Door opening button | 1 | NN-3809                                   |

| Ref. No. | Part No.       | Part Name & Description | Pcs/Set | Remarks                                           |
|----------|----------------|-------------------------|---------|---------------------------------------------------|
| E6       | A81265110BP    | Smoke panel             | 1       |                                                   |
| E7       | A81275110BP    | Bracket                 | 1       |                                                   |
| E8-1     | A800L5100HSP   | Escutcheon base assy    | 1       | NN-3559 (NOTE 5)<br>With Membrane switch assy     |
| E8-2     | A800L5110WP    | Escutcheon base assy    | 1       | NN-3809 (NOTE 5)<br>With Membrane switch assy     |
| E8-3     | A800L5110HSP   | Escutcheon base assy    | 1       | NN-3859 SPG (NOTE 5)<br>With Membrane switch assy |
| E8-4     | A800L5110HWP   | Escutcheon base assy    | 1       | NN-3859 WPG<br>With Membrane switch assy          |
| E8-5     | A800L5120HSP   | Escutcheon base assy    | 1       | NN-3959 SPG (NOTE 5)<br>With Membrane switch assy |
| E8-6     | A800L5120HWP   | Escutcheon base assy    | 1       | NN-3959 WPG<br>With Membrane switch assy          |
| E9-1     | △ A630Y5100HSP | Membrane switch assy    | 1       | NN-3559<br>(With Escutcheon sheet)                |
| E9-2     | △ A630Y5110WP  | Membrane switch assy    | 1       | NN-3809<br>(With Escutcheon sheet)                |
| E9-3     | △ A630Y5110HSP | Membrane switch assy    | 1       | NN-3859 SPG<br>(With Escutcheon sheet)            |
| E9-4     | △ A630Y5110HWP | Membrane switch assy    | 1       | NN-3859 WPG<br>(With Escutcheon sheet)            |
| E9-5     | △ A630Y5120HSP | Membrane switch assy    | 1       | NN-3959 SPG<br>(With Escutcheon sheet)            |
| E9-6     | △ A630Y5120HWP | Membrane switch assy    | 1       | NN-3959 WPG<br>(With Escutcheon sheet)            |
| E10      | A81285110BP    | Bracket B               | 1       |                                                   |
| E11      | A82965110BP    | Spacer                  | 1       |                                                   |
| E12      | A82565110BP    | Door opening lever      | 1       |                                                   |
| E13-1    | A83375100HSP   | Escutcheon sheet        | 1       | NN-3559                                           |
| E13-2    | A83375110WP    | Escutcheon sheet        | 1       | NN-3809                                           |
| E13-3    | A83375110HSP   | Escutcheon sheet        | 1       | NN-3859 SPG                                       |
| E13-4    | A83375110HWP   | Escutcheon sheet        | 1       | NN-3859 WPG                                       |
| E13-5    | A83375120HSP   | Escutcheon sheet        | 1       | NN-3959 SPG                                       |
| E13-6    | A83375120HWP   | Escutcheon sheet        | 1       | NN-3959 WPG                                       |
| E14-1    | ANE8029-Y00H   | Spacer                  | 1       | NN-3559 NN-3859 NN-3959                           |
| E14-2    | ANE8029-5LOT   | Spacer                  | 1       | NN-3809                                           |
| E15      | A82845110BP    | Cushion rubber          | 1       |                                                   |
| E16      | A62865110BP    | Shield plate            | 1       |                                                   |

#### PACKING AND ACCESSORIES

|       |              |            |   |                               |
|-------|--------------|------------|---|-------------------------------|
| P1-1  | A03345100HPZ | Menu label | 1 | NN-3559 (Portuguese)          |
| P1-2  | A03345100HSZ | Menu label | 1 | NN-3559 (Spanish)             |
| P1-3  | A03345100HZ  | Menu label | 1 | NN-3559 (Dutch)               |
| P1-4  | A03345100HFZ | Menu label | 1 | NN-3559 (French)              |
| P1-5  | A03345100HEZ | Menu label | 1 | NN-3559 (Italian)             |
| P1-6  | A03345100HDZ | Menu label | 1 | NN-3559 (Danish)              |
| P1-7  | A03345100HNZ | Menu label | 1 | NN-3559 (Norwegian)           |
| P1-8  | A03345100HKZ | Menu label | 1 | NN-3559 (Finnish)             |
| P1-9  | A03345100HWZ | Menu label | 1 | NN-3559 (Swedish)             |
| P1-10 | A03345110PZ  | Menu label | 1 | NN-3809 (Portuguese)          |
| P1-11 | A03345110SZ  | Menu label | 1 | NN-3809 (Spanish)             |
| P1-12 | A03345110HZ  | Menu label | 1 | NN-3809 (Dutch)               |
| P1-13 | A03345110FZ  | Menu label | 1 | NN-3809 (French)              |
| P1-14 | A03345110EZ  | Menu label | 1 | NN-3809 (Italian)             |
| P1-15 | A03345110DZ  | Menu label | 1 | NN-3809 (Danish)              |
| P1-16 | A03345110NZ  | Menu label | 1 | NN-3809 (Norwegian)           |
| P1-17 | A03345110KZ  | Menu label | 1 | NN-3809 (Finnish)             |
| P1-18 | A03345110WZ  | Menu label | 1 | NN-3809 (Swedish)             |
| P1-19 | A03345110HPZ | Menu label | 1 | NN-3859, NN-3959 (Portuguese) |
| P1-20 | A03345110HSZ | Menu label | 1 | NN-3859, NN-3959 (Spanish)    |
| P1-21 | A03345110HZ  | Menu label | 1 | NN-3859, NN-3959 (Dutch)      |
| P1-22 | A03345110HFZ | Menu label | 1 | NN-3859, NN-3959 (French)     |
| P1-23 | A03345110HEZ | Menu label | 1 | NN-3859, NN-3959 (Italian)    |
| P1-24 | A03345110HDZ | Menu label | 1 | NN-3859, NN-3959 (Danish)     |
| P1-25 | A03345110HNZ | Menu label | 1 | NN-3859, NN-3959 (Norwegian)  |
| P1-26 | A03345110HKZ | Menu label | 1 | NN-3859, NN-3959 (Finnish)    |
| P1-27 | A03345110HWZ | Menu label | 1 | NN-3859, NN-3959 (Swedish)    |

| Ref. No.                               | Part No.     | Part Name & Description    | Pcs/Set | Remarks                                        |
|----------------------------------------|--------------|----------------------------|---------|------------------------------------------------|
| P2-1                                   | A00035110SP  | Instruction book           | 1       | NN-3559/NN-3859 SPG                            |
| P2-2                                   | A00035110EP  | Instruction book           | 1       | NN-3809/NN-3859 WPG                            |
| P2-3                                   | A00035120SP  | Instruction book           | 1       | NN-3959 SPG                                    |
| P2-4                                   | A00035120WP  | Instruction book           | 1       | NN-3959 WPG                                    |
| P3                                     | A060W5020AP  | Oven pan                   | 1       |                                                |
| P4-1                                   | A01025100HEP | Packing case, paper        | 1       | NN-3559                                        |
| P4-2                                   | A01025110EP  | Packing case, paper        | 1       | NN-3809                                        |
| P4-3                                   | A01025110HEP | Packing case, paper        | 1       | NN-3859                                        |
| P4-4                                   | A01025120HEP | Packing case, paper        | 1       | NN-3959                                        |
| P5                                     | A01045110BP  | Upper filler               | 1       |                                                |
| P6                                     | A01055110BP  | Lower filler               | 1       |                                                |
| P7                                     | A01065200AP  | Vinyl cover                | 1       |                                                |
| ※ P8                                   | E01074060AP  | Door sheet                 | 1       |                                                |
| P9                                     | A01135110BP  | Tray styrol                | 1       |                                                |
| P10                                    | A03385110BP  | Packing                    | 1       |                                                |
| ※ P11                                  | AEE0169Q50GN | Servicenter list           | 1       |                                                |
| P12                                    | ANE0207-860  | Styrol sheet               | 1       |                                                |
| P13                                    | A06015020AP  | Metal tray                 | 1       |                                                |
| P14                                    | A06025110BP  | Top rack shelf             | 1       |                                                |
| P15                                    | A06485110BP  | Square splash guard        | 1       |                                                |
| P16                                    | A07335120BP  | Bakery spoons              | 1       | NN-3959                                        |
| P17                                    | A06485020AP  | Round splash guard         | 1       |                                                |
| P18                                    | A02075110BP  | Styrol sheet               | 1       |                                                |
| P19                                    | A07064700AP  | Plastic defrost rack       | 1       | NN-3809, NN-3859, NN-3959                      |
| P20                                    | A062D5120BP  | Bread case                 | 1       | NN-3959                                        |
| P21                                    | A062E5120GP  | Fan                        | 1       | NN-3959                                        |
| <b>WIRING MATERIAL</b>                 |              |                            |         |                                                |
| W1-1                                   | A030A5100SP  | Lead wire harness          | 1       | NN-3559                                        |
| W1-2                                   | A030A5110SP  | Lead wire harness          | 1       | NN-3809, NN-3859, NN-3959                      |
| W2-1                                   | A03635110BP  | Lead wire                  | 1       | NN-3809, NN-3859                               |
| W2-2                                   | A03635120BP  | Lead wire                  | 1       | NN-3959                                        |
| W3                                     | A03615120BP  | Lead wire                  | 1       | NN-3959                                        |
| <b>Ref.No.4 Triac assy</b>             |              |                            |         |                                                |
| C500, 501                              | AECF055F104Z | Ceramic capacitor          | 2       | (Multi layer)<br>0.1μF, -20%+80%, 50V          |
| C502, 503                              | ECQE2A104KF  | Polyester capacitor        | 2       | 0.1μF, ±20%, 250V                              |
| CN500                                  | AEEMMB01505W | 5 pin connector            | 1       |                                                |
| CN501                                  | AEEMMB00703W | 3 pin connector            | 1       |                                                |
| D500, 501                              | AESM3J247LB1 | Triac                      | 2       |                                                |
| IC500, 501                             | AEICTLP665JF | Photo triac                | 2       |                                                |
| R500, 501, 502, 503                    | ERDS1TJ561T  | Carbon film resistor       | 4       | 560Ω, ±3%, 1/2W                                |
| R504, 505, 506, 507                    | ERDS2TJ181T  | Carbon film resistor       | 4       | 180Ω, ±3%, 1/4W                                |
| R508, 509                              | ERDS2TJ331T  | Carbon film resistor       | 2       | 330Ω, ±3%, 1/4W                                |
| R510, 511                              | ERDS2TJ121T  | Carbon film resistor       | 2       | 120Ω, ±3%, 1/4W                                |
| <b>Ref.No.80 L.V. Transformer assy</b> |              |                            |         |                                                |
| C8                                     | ECEA1CU222E  | Electrolytic capacitor, AI | 1       | NN-3809, NN-3859, NN-3959<br>2200μF, ±20%, 16V |

| Ref. No.                                       | Part No.       | Part Name & Description | Pcs/Set | Remarks                                   |
|------------------------------------------------|----------------|-------------------------|---------|-------------------------------------------|
| CN51-1                                         | A03575100GP    | Lead wire               | 1       | NN-3559                                   |
| CN51-2                                         | A03575110BP    | Lead wire               | 1       | NN-3809, NN-3859, NN-3959                 |
| CN50                                           | AEEMMA00503R   | 3 pin connector         | 1       | NN-3809, NN-3859, NN-3959                 |
| CN100                                          | AEEMMA00503R   | 3 pin connector         | 1       | NN-3509, NN-3559                          |
| F2-1, F3-1                                     | A604K5100GP    | Protector               | 2       | NN-3559                                   |
| F2-2, F3-2                                     | ANE604K8U0BP   | Protector               | 2       | NN-3809, NN-3859, NN-3959                 |
| F1                                             | A604K5110BP    | Protector               | 1       | NN-3809, NN-3859, NN-3959                 |
| Q4-1                                           | A6244-1500     | Heat sink               | 1       | NN-3809, NN-3859, NN-3959                 |
| Q4-2                                           | 2SB941         | Transistor              | 1       | NN-3809, NN-3859, NN-3959                 |
| D505, 52, 53                                   | AEDNERB1202L   | Diode, Si               | 4       | NN-3809, NN-3859, NN-3959                 |
| T1-1                                           | △ A62495100GP  | L.V. Transformer        | 1       | NN-3559<br>(ETP43K124E) (11VA)            |
| T1-2                                           | △ A62495110GP  | L.V. Transformer        | 1       | NN-3809, NN-3859, NN-3959<br>(ETP57P119E) |
|                                                | A65645110BP    | Bracket                 | 1       |                                           |
| <b>Ref.No.81 Noise filter assy</b>             |                |                         |         |                                           |
| C1                                             | ECQU2A104MN    | Polyester capacitor     | 1       | 0.1μF, ±20%, 250V                         |
| C4, 5                                          | △ ECKDNS472MEX | Ceramic capacitor       | 2       | (Single layer)<br>0.0047μF, ±20%, 250V    |
| CN1                                            | AEEMMA00703W   | 3 pin connector         | 1       |                                           |
| L1                                             | ANE621AZ70BP   | Filter coil             | 1       |                                           |
| ZNR1                                           | ERZC10DK621F   | Varistor                | 1       |                                           |
| ZNR2, 3                                        | ERZC10DK112F   | Varistor                | 2       |                                           |
|                                                | ANE6231H60RN   | Fuse holder             | 2       |                                           |
|                                                | ANE6231Q50GN   | Fuse holder             | 2       |                                           |
| <b>Ref.No.121 Motor control assy (NN-3959)</b> |                |                         |         |                                           |
| C800                                           | ECQE2A104KF    | Polyester capacitor     | 1       | 0.1μF, ±20%, 250V                         |
| C901                                           | AECF055F104Z   | Ceramic capacitor       | 1       | (Multi layer)<br>0.1μF, -20%+80%, 50V     |
| CN900                                          | AEEMMB03F06W   | 6 pin connector         | 1       |                                           |
| CN901                                          | AEEMW-P86571   | 7 pin connector         | 1       |                                           |
| D900                                           | AESM3J247LB2   | Triac                   | 1       |                                           |
| IC900                                          | AEICTLP665JF   | Photo triac             | 1       |                                           |
| IC901                                          | ON1114         | Photointerrupter        | 1       |                                           |
| R900, 901, 905, 907                            | ERDS1TJ561T    | Carbon film resistor    | 4       | 560Ω, ±5%, 1/2W                           |
| R902, 903                                      | ERDS2TJ151T    | Carbon film resistor    | 2       | 150Ω, ±5%, 1/4W                           |
| R904                                           | ERDS2TJ331T    | Carbon film resistor    | 1       | 330Ω, ±5%, 1/4W                           |
| R905                                           | ERDS2TJ680T    | Carbon film resistor    | 1       | 68Ω, ±5%, 1/4W                            |
| RY7                                            | △ AEBVG-18P-0  | Power relay             | 1       | (18V)                                     |

NOTE 5: Please order name plate together.

## PARTS LIST (NN-3559)

| Ref. No.         | Part No.     | Description                       | Pcs/Set | Remarks                     | Ref. No.                                        | Part No.     | Description          | Pcs/Set | Remarks                                            |
|------------------|--------------|-----------------------------------|---------|-----------------------------|-------------------------------------------------|--------------|----------------------|---------|----------------------------------------------------|
| DISP             | A64565100GP  | Fluorescent Tube                  | 1       |                             | C3                                              | ECEA1VU471B  | Aluminium capacitor  | 1       | 470 $\mu$ F, $\pm$ 20%, 35V                        |
| SPACER           | ANE6238-3ZC  | Spacer Cushion                    | 1       | For DISP                    | C4                                              | ECEA1CU220B  | Aluminium capacitor  | 1       | 22 $\mu$ F, $\pm$ 20%, 16V                         |
| CN3              | AEEMMA00F04W | 4 pin connector                   | 1       |                             | C5,6,13,16,17,21,22,23,24,26                    | ECBT1E103ZF5 | Ceramic capacitor    | 10      | (Single layer)<br>0.01 $\mu$ F, $\pm$ 20%+80%, 25V |
| CN4              | AEEM11FDZBTM | 11 pin connector                  | 1       |                             | C7,11,12,20,25,27                               | AECF055F104Z | Ceramic capacitor    | 6       | (Multi layer)<br>0.1 $\mu$ F, $\pm$ 20%+60%, 50V   |
| CN5              | AEEMMA0FD08W | 8 pin connector                   | 1       |                             | C8                                              | ECEA1HU2R2B  | Aluminium capacitor  | 1       | 2.2 $\mu$ F, $\pm$ 20%, 50V                        |
| CN7              | AEEMB05BEHA  | 5 pin connector                   | 1       |                             | C14,18,19                                       | ECKR1H103ZF  | Ceramic capacitor    | 3       | (Single layer)<br>0.01 $\mu$ F, $\pm$ 20%+80%, 50V |
| CN21,22          | AEEM52011061 | 6 pin connector                   | 2       |                             | R1,2                                            | ERDS2TJ201T  | Carbon Film Resistor | 2       | 200 $\Omega$ , $\pm$ 5%, 1/4W                      |
| BZ               | AEFB22EP2002 | Buzzer                            | 1       | 2.0KHz                      | R3,11,12,13,22,23,25,27,34,35,36,37,38,39,43,48 | ERDS2TJ103T  | Carbon Film Resistor | 16      | 10K $\Omega$ , $\pm$ 5%, 1/4W                      |
| CX1              | AEFFT4R19GW  | Ceramic Resonator                 | 1       | 4.19MHz                     | R4,5                                            | ERDS2TJ302T  | Carbon Film Resistor | 2       | 3K $\Omega$ , $\pm$ 5%, 1/4W                       |
| RY2,3,4,6        | AEG5J1EG18A  | Power Relay                       | 4       | (18V)                       | R6                                              | ERG2SJ470P   | Metal Oxide Resistor | 1       | 47 $\Omega$ , $\pm$ 5%, 2W                         |
| RY8              | AEAWJXDC18G  | Power Relay                       | 1       | (18V)                       | R7,29,31,49                                     | ERDS2TJ512T  | Carbon Film Resistor | 4       | 5.1K $\Omega$ , $\pm$ 5%, 1/4W                     |
| IC1              | AEIC85141197 | L.S.I.<br>(MOS Microprocessor IC) | 1       |                             | R8,15,40                                        | ERDS2TJ102T  | Carbon Film Resistor | 3       | 1.0K $\Omega$ , $\pm$ 5%, 1/4W                     |
| IC2              | AN6752       | I.C.                              | 1       |                             | R14                                             | ERDS2TJ914T  | Carbon Film Resistor | 1       | 910K $\Omega$ , $\pm$ 5%, 1/4W                     |
| IC3,4            | AEICBA12004  | I.C.                              | 2       |                             | R24                                             | ERDS2TJ201T  | Carbon Film Resistor | 1       | 2K $\Omega$ , $\pm$ 5%, 1/4W                       |
| Q1,5,7           | 2SD2006-R    | Transistor, Si, 1.2W              | 3       | (100MHz)                    | R28                                             | ERDS2TJ273T  | Carbon Film Resistor | 1       | 27K $\Omega$ , $\pm$ 5%, 1/4W                      |
| Q3               | UN4211       | Transistor, Si, 300mW             | 1       |                             | R30                                             | ERDS2TJ153T  | Carbon Film Resistor | 1       | 15K $\Omega$ , $\pm$ 5%, 1/4W                      |
| Q6               | 2SC1318-R    | Transistor, Si, 400mW             | 1       | (200MHz)                    | R32,47                                          | ERDS2TJ100T  | Carbon Film Resistor | 2       | 10 $\Omega$ , 25%, 1/4W                            |
| Q8,9,10,11       | UN4123       | Transistor, Si, 300mW             | 4       |                             | R33,44,45,46                                    | ERDS2TJ104T  | Carbon Film Resistor | 4       | 100K $\Omega$ , $\pm$ 5%, 1/4W                     |
| Q12              | 2SC1685-R    | Transistor, Si, 250mW             | 1       | (150MHz)                    | R41,42                                          | ERDS2TJ390T  | Carbon Film Resistor | 2       | 39 $\Omega$ , $\pm$ 5%, 1/4W                       |
| D1,2,3           | AEDNERA1502  | Diode                             | 3       | Si, 2A                      | Z1                                              | AEXB10104J   | Carbon Film Resistor | 1       | 100K $\Omega$ X 10, $\pm$ 5%, 1/8W                 |
| D4,5,6,7,9,10,12 | MA195        | Diode                             | 7       | Si, 200mA                   | Z2,3                                            | AEXB08104J   | Carbon Film Resistor | 2       | 100K $\Omega$ X 8, $\pm$ 5%, 1/8W                  |
| D8               | MA196        | Diode                             | 1       | Si, 200mA                   |                                                 |              |                      |         |                                                    |
| ZD1              | AEDZ4R7ES3T1 | Zener Diode                       | 1       |                             |                                                 |              |                      |         |                                                    |
| ZD2              | AEDZ5R6ES2T1 | Zener Diode                       | 1       |                             |                                                 |              |                      |         |                                                    |
| ZD3,4            | AEDZ9R1ES3T1 | Zener Diode                       | 2       |                             |                                                 |              |                      |         |                                                    |
| ZD10             | AEDZ15ES3T1  | Zener Diode                       | 1       |                             |                                                 |              |                      |         |                                                    |
| C1               | ECEA1VU102E  | Aluminium capacitor               | 1       | 100 $\mu$ F, $\pm$ 20%, 35V |                                                 |              |                      |         |                                                    |
| C2               | ECEA1VU221B  | Aluminium capacitor               | 1       | 220 $\mu$ F, $\pm$ 20%, 35V |                                                 |              |                      |         |                                                    |

## SERVICE FIXTURES AND TOOLS

### EXTENSION CABLES

NOTE: To be used when repairing the DPC board assembly directly on the oven for easy access of the board.

| Ref. No. | Part No. | Description             | Pcs/Set | Remarks      |
|----------|----------|-------------------------|---------|--------------|
|          | AT40M004 | 4 pin Extension Cable   | 1       | Cable No. 16 |
|          | AT40K005 | 5 pin Extension Cable   | 1       | Cable No. 41 |
|          | AT40M008 | 8 pin Extension Cable   | 1       | Cable No. 38 |
|          | AT40E006 | 1 pinX6 Extension Cable | 2       | Cable No. 9  |

### DPC COMMON CHECKER AND ITS CABLE

NOTE: To be used only when DPC common checker is available.

| Ref. No. | Part No.     | Description         | Pcs/Set | Remarks |
|----------|--------------|---------------------|---------|---------|
|          | ANE600ZK70GP | DPC. Common Checker | 1       |         |
|          | AT30A5100GP  | DPC. Checker Cable  | 1       | NOTE    |

### Ref. No. E4 P.C.Board F assy

| Ref. No.        | Part No.    | Description | Pcs/Set | Remarks |
|-----------------|-------------|-------------|---------|---------|
| L2,3,4,6,7      | A61655110BP | Pilot Lamp  | 5       |         |
| SW2,3,4,6,7,8,9 | EVQQTG05R   | Push switch | 7       |         |
|                 | A65905100GP | Flat Cable  | 2       | CN21,22 |

## PARTS LIST (NN-3809/3859/3959)

| Ref. No.                                                          | Part No.     | Description                       | Pcs/Set | Remarks                       |
|-------------------------------------------------------------------|--------------|-----------------------------------|---------|-------------------------------|
| DISP                                                              | A64565120BP  | Fluorescent Tube                  | 1       |                               |
| SPACER                                                            | ANE6238-3Z0  | Spacer cushion                    | 1       |                               |
| CN1                                                               | AEEMB07BEHA  | 7 pin connector                   | 1       |                               |
| CN3                                                               | AEEM11FDZBTM | 11 pin connector                  | 1       |                               |
| CN4                                                               | AEEMB05PSHF3 | 5 pin connector                   | 1       |                               |
| CN5                                                               | AEEMMA0FD08W | 8 pin connector                   | 1       |                               |
| CN6                                                               | AEEMMC00503W | 3 pin connector                   | 1       |                               |
| CN8                                                               | AEEMMA07F07W | 7 pin connector                   | 1       | NN-3809, NN-3859              |
| CN8                                                               | AEEMMAFF12W  | 12 pin connector                  | 1       | NN-3959                       |
| CN9                                                               | AEEMB09P-MQ  | 9 pin connector                   | 1       |                               |
| CN21                                                              | AEEM52011081 | 8 pin connector                   | 1       |                               |
| CN24                                                              | AEEM52011101 | 10 pin connector                  | 1       |                               |
| BZ                                                                | AEFB22EP2002 | Buzzer                            | 1       | 2.0 KHz                       |
| CK1                                                               | AEFT4R19GW   | Ceramic Resonator                 | 1       | 4.19 MHz                      |
| RY1                                                               | AEAWJZDC18A  | Power Relay                       | 1       | (18V)                         |
| RY2,3,4,6                                                         | AEG5J1EG18B  | Power Relay                       | 4       | (18V)                         |
| RY8                                                               | AEAWJXDC18G  | Power Relay                       | 1       | (18V)                         |
| IC1                                                               | AEIC89745125 | L.S.I.<br>(MOS Microprocessor IC) | 1       |                               |
| IC5                                                               | AEICBA17805  | I.C.                              | 1       |                               |
| IC6                                                               | MN1280       | I.C.                              | 1       |                               |
| IC12                                                              | AEICBA12004  | I.C.                              | 1       |                               |
| Q1,2                                                              | 2SD2006-R    | Transistor, Si, 1.2W              | 2       | (100MHz)                      |
| Q3                                                                | UN4123       | Transistor, Si, 300mW             | 1       |                               |
| Q5,6,12,13,14,15                                                  | UN4111       | Transistor, Si, 300mW             | 6       |                               |
| Q7                                                                | 2SA564A      | Transistor, Si, 400mW             | 1       | NN-3809, NN-3859<br>(200MHz)  |
| Q7,30                                                             | 2SA564A      | Transistor, Si, 400mW             | 2       | NN-3959<br>(200MHz)           |
| Q8,22                                                             | 2SC1685-R    | Transistor, Si, 250mW             | 2       | NN-3809, NN-3859<br>(150MHz)  |
| Q8,22,31                                                          | 2SC1685-R    | Transistor, Si, 250mW             | 3       | NN-3959<br>(150MHz)           |
| Q9,25                                                             | 2SC1318-R    | Transistor, Si, 400mW             | 2       | NN-3809, NN-3859<br>(200MHz)  |
| Q10,20,23                                                         | UN4211       | Transistor, Si, 300mW             | 3       |                               |
| Q10,20,23,27,28                                                   | UN4211       | Transistor, Si, 300mW             | 5       | NN-3959                       |
| Q26                                                               | UN4223       | Transistor, Si, 300mW             | 1       |                               |
| D1,2,3                                                            | AEDNERA1502  | Diode                             | 3       | NN-3809, NN-3859<br>Si, 2A    |
| D1,2,3,6                                                          | AEDNERA1502  | Diode                             | 4       | NN-3959<br>Si, 2A             |
| D8,9,10,11,12,13,18,19,20,22,23,26,30,31,32,33,34,38,39,40,39     | MA195        | Diode                             | 19      | NN-3809, NN-3859<br>Si, 200mA |
| D5,7,8,9,10,11,12,13,18,19,20,22,26,27,30,31,32,33,34,38,39,40,41 | MA195        | Diode                             | 23      | NN-3959<br>Si, 200mA          |
| ZD1,2                                                             | AEDZ9R1ES3T1 | Zener Diode                       | 2       |                               |
| ZD3,4                                                             | AEDZ4R7ES3T1 | Zener Diode                       | 2       |                               |

|                                      |              |                      |    |                                                             |
|--------------------------------------|--------------|----------------------|----|-------------------------------------------------------------|
| ZD5                                  | AEDZ15ES3T1  | Zener Diode          | 1  |                                                             |
| C1                                   | ECEA1VU102E  | Aluminium capacitor  | 1  | 1000µF, ±20%, 35V                                           |
| C2                                   | ECEA1VU331B  | Aluminium capacitor  | 1  | 330µF, ±20%, 35V                                            |
| C3                                   | ECEA1VU471B  | Aluminium capacitor  | 1  | 470µF, ±20%, 35V                                            |
| C4                                   | ECEA1VU104Z  | Aluminium capacitor  | 1  | NN-3959<br>0.1F, 5.5V                                       |
| C5                                   | ECEA1HUR47B  | Aluminium capacitor  | 1  | 0.47µF, ±20%, 50V                                           |
| C6,12                                | ECEA1CU220B  | Aluminium capacitor  | 2  | 22µF, ±20%, 16V                                             |
| C7                                   | ECEA1EU101B  | Aluminium capacitor  | 1  | 100µF, ±20%, 25V                                            |
| C9,10,11,13,14,20                    | AECF055F104Z | Ceramic capacitor    | 6  | (Multi layer)<br>0.1µF, -20%+80%, 50V                       |
| C17                                  | ECBT1H101KB5 | Ceramic capacitor    | 1  | (Single layer)<br>100PF, ±10%, 50V                          |
| C18,23,24,27,28,29,32                | ECBT1E103ZF5 | Ceramic capacitor    | 7  | NN-3809, NN-3859<br>(Single layer)<br>0.01µF, -20%+80%, 25V |
| C18,22,23,24,27,28,29,30,31,32,35,36 | ECBT1E103ZF5 | Ceramic capacitor    | 12 | NN-3959<br>(Single layer)<br>0.01µF, -20%+80%, 25V          |
| C19,21                               | ECBT1E223ZF5 | Ceramic capacitor    | 2  | (Single layer)<br>0.022µF, -20%+80%, 25V                    |
| R1,2                                 | ERDS2TJ201T  | Carbon film resistor | 2  | 200Ω, ±5%, 1/4W                                             |
| R3,9,25,33,36,37,40,41,43,82,83,84   | ERDS2TJ103T  | Carbon film resistor | 12 | NN-3809, NN-3859<br>10kΩ, ±5%, 1/4W                         |
| R3,9,25,33,36,37,40,41,43,55,58      | ERDS2TJ103T  | Carbon film resistor | 11 | NN-3959<br>10kΩ, ±5%, 1/4W                                  |
| R5,8,22,42                           | ERDS2TJ102T  | Carbon film resistor | 4  | 1.0kΩ, ±5%, 1/4W                                            |
| R6,20,39,70                          | ERDS2TJ104T  | Carbon film resistor | 4  | 100kΩ, ±5%, 1/4W                                            |
| R16,17                               | ERDS2TJ101T  | Carbon film resistor | 2  | 100Ω, ±5%, 1/4W                                             |
| R21,31,34,35,38                      | ERDS2TJ512T  | Carbon film resistor | 5  | NN-3809, NN-3859<br>5.1kΩ, ±5%, 1/4W                        |
| R21,31,34,35,38,56,57                | ERDS2TJ512T  | Carbon film resistor | 7  | NN-3959<br>5.1kΩ, ±5%, 1/4W                                 |
| R23                                  | ERDS2TJ334T  | Carbon film resistor | 1  | 330kΩ, ±5%, 1/4W                                            |
| R24                                  | ERDS2TJ751T  | Carbon film resistor | 1  | NN-3809, NN-3859<br>750Ω, ±5%, 1/4W                         |
| R24,73                               | ERDS2TJ751T  | Carbon film resistor | 2  | NN-3959<br>750Ω, ±5%, 1/4W                                  |
| R26                                  | EROS2TKF5112 | Metal oxide resistor | 1  | 51.1kΩ, ±1%, 1/4W                                           |
| R27,32                               | ERDS2TJ471T  | Carbon film resistor | 2  | 470Ω, ±5%, 1/4W                                             |
| R28                                  | ERDS2TJ914T  | Carbon film resistor | 1  | 910kΩ, ±5%, 1/4W                                            |
| R61                                  | ERDS2TJ470T  | Carbon film resistor | 1  | 47Ω, ±5%, 1/4W                                              |
| R71                                  | ERDS2TJ204T  | Carbon film resistor | 1  | 200kΩ, ±5%, 1/4W                                            |
| Z1                                   | AEXB08104T   | Carbon film resistor | 1  | 100kΩ × 8, ±5%, 1/8W                                        |
| Z2                                   | AEXB04104T   | Carbon film resistor | 1  | 100kΩ × 4, ±5%, 1/8W                                        |
| Z4                                   | AEXB15104T   | Carbon film resistor | 1  | 100kΩ × 15, ±5%, 1/8W                                       |

## SERVICE FIXTURES AND TOOLS

### EXTENSION CABLES

NOTE: To be used when repairing the DPC board assembly directly on the oven for easy access of the board.

| Ref. No. | Part No. | Description               | Pcs/Set | Remarks                          |
|----------|----------|---------------------------|---------|----------------------------------|
|          | AT40M003 | 3 pin Extension Cable     | 1       | Cable No. 36                     |
|          | AT40M007 | 7 pin Extension Cable     | 1       | NN-3809, NN-3859<br>Cable No. 37 |
|          | AT40K007 | 7 pin Extension Cable     | 1       | Cable No. 42                     |
|          | AT40M008 | 8 pin Extension Cable     | 1       | Cable No. 38                     |
|          | AT40L009 | 9 pin Extension Cable     | 1       | Cable No. 44                     |
|          | AT40M012 | 12 pin Extension Cable    | 1       | NN-3959<br>Cable No. 43          |
|          | AT40E006 | 1 pin × 6 Extension Cable | 2       | Cable No. 9                      |

### Ref. No. E4 P.C.Board F assy

| Ref. No.                        | Part No.     | Description           | Pcs/Set | Remarks                                |
|---------------------------------|--------------|-----------------------|---------|----------------------------------------|
| IC2                             | AEICBU4042   | I.C.                  | 1       |                                        |
| IC3,4                           | AEICBU4028   | I.C.                  | 2       |                                        |
| IC8,9                           | AEICBA12004  | I.C.                  | 2       |                                        |
| Q16                             | UN4111       | Transistor, Si, 300mW | 1       |                                        |
| D14,15,16,17                    | MA195        | Diode                 | 4       | Si, 200mA                              |
| C25                             | AECF055F104Z | Ceramic capacitor     | 1       | (Multi layer)<br>0.01µF, -20%+80%, 50V |
| Z3                              | AEXB04104J   | Carbon film resistor  | 1       | 100kΩ × 4, ±5%, 1/3W                   |
| VR1                             | EVND2AA02B14 | Volume Push switch    | 1       | 10kΩ                                   |
| SW1 2,3,4,5,6,7,8,9,10,11,12,13 | EVQQTGC5R    |                       | 13      |                                        |
| L1,2,3,4,5,6,7,8,9,10,11,12     | A61655110BP  | Pilot lamp            | 12      |                                        |